

	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b>  <b>Cooperative Agreement</b>		<b>GRANT NUMBER (FAIN):</b> 00A00249 <b>MODIFICATION NUMBER:</b> 0 <b>PROGRAM CODE:</b> SE	<b>DATE OF AWARD</b>
			<b>TYPE OF ACTION</b> New	<b>MAILING DATE</b>
			<b>PAYMENT METHOD:</b> ASAP	<b>ACH#</b> 10010
<b>RECIPIENT TYPE:</b> County		<b>Send Payment Request to:</b> USEPA LVFC 4220 S. Maryland Pkwy Bldg. C, Ste 503 Las Vegas, NV 89119: Tel: (702) 798-2406 Email: lvfc-grants@epa.gov		
<b>RECIPIENT:</b> Barnstable County 3195 Main Street Barnstable, MA 02630 <b>EIN:</b> 04-6001419		<b>PAYEE:</b> Barnstable County 3195 Main Street Barnstable, MA 02630		
<b>PROJECT MANAGER</b> George Heufelder 3195 Main Street Barnstable, MA 02630 <b>E-Mail:</b> gheufelder@barnstablecounty.org <b>Phone:</b> 508-375-6616		<b>EPA PROJECT OFFICER</b> Bryan Dore 5 Post Office Square, Suite 100, OEP 06-1 Boston, MA 02109-3912 <b>E-Mail:</b> dore.bryan@epa.gov <b>Phone:</b> 617-918-1211		<b>EPA GRANT SPECIALIST</b> Jean Crocker Grants Management Office, OARM 05-5 <b>E-Mail:</b> crocker.jean@epa.gov <b>Phone:</b> 617-918-1498
<b>PROJECT TITLE AND DESCRIPTION</b> FULL SCALE ASSESSMENT OF NON-PROPRIETARY PASSIVE NITROGEN REMOVING SEPTIC SYSTEMS The project from the MASSTC seeks to demonstrate the efficacy of using a modified soil treatment area to remove up to 90% of nitrogen in a passive manner from residential septic systems. Septic systems are thought to be responsible for nearly 80% of anthropogenic nitrogen in marine embayments. The project seeks to design and implement a non-proprietary technique for amending soil treatment options in residential septic systems. The partners will work to identify and recruit residential pilot sites, including installation and monitoring of their performance in a real-world setting. The project also seeks the development of specifications to facilitate the technique for Regional approval, allowing for other New England states to adopt the STA technique into regulations. Finally, the project will institute a management tool to relieve municipalities of the tasks of tracking the various operation and maintenance features of advanced onsite wastewater treatments systems, working to expand and adapt a tool currently in use at the MASSTC.				
<b>BUDGET PERIOD</b> 09/01/2016 - 08/31/2020	<b>PROJECT PERIOD</b> 09/01/2016 - 08/31/2020	<b>TOTAL BUDGET PERIOD COST</b> \$835,117.00	<b>TOTAL PROJECT PERIOD COST</b> \$835,117.00	
<b>NOTICE OF AWARD</b>				
Based on your Application dated 07/27/2016 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards \$725,511. EPA agrees to cost-share <u>86.88%</u> of all approved budget period costs incurred, up to and not exceeding total federal funding of \$725,511. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA regulatory and statutory provisions, all terms and conditions of this agreement and any attachments.				
<b>ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)</b>		<b>AWARD APPROVAL OFFICE</b>		
<b>ORGANIZATION / ADDRESS</b> EPA New England 5 Post Office Square, Suite 100 Boston, MA 02109-3912		<b>ORGANIZATION / ADDRESS</b> U.S. EPA, Region 1 OEP 5 Post Office Square, Suite 100 Boston, MA 02109-3912		
<b>THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY</b>				
Digital signature applied by EPA Award Official -				<b>DATE</b>

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FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$	\$ 725,511	\$ 725,511
EPA In-Kind Amount	\$	\$	\$ 0
Unexpended Prior Year Balance	\$	\$	\$ 0
Other Federal Funds	\$	\$	\$ 0
Recipient Contribution	\$	\$ 106,606	\$ 106,606
State Contribution	\$	\$	\$ 0
Local Contribution	\$	\$	\$ 0
Other Contribution	\$	\$	\$ 0
Allowable Project Cost	\$ 0	\$ 832,117	\$ 832,117

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.129 - Southeast New England Coastal Watershed Restoration Program (SNEP)	Consolidated Appropriations Act 2016 Public Law No: 114-113.	2 CFR 200 2 CFR 1500 and 40 CFR 33

[illegible]

## Budget Summary Page

<b>Table A - Object Class Category (Non-construction)</b>	<b>Total Approved Allowable Budget Period Cost</b>
<b>1. Personnel</b>	\$106,786
<b>2. Fringe Benefits</b>	\$31,046
<b>3. Travel</b>	\$7,150
<b>4. Equipment</b>	\$0
<b>5. Supplies</b>	\$26,000
<b>6. Contractual</b>	\$85,400
<b>7. Construction</b>	\$0
<b>8. Other</b>	\$578,735
<b>9. Total Direct Charges</b>	\$835,117
<b>10. Indirect Costs: % Base</b>	\$0
<b>11. Total (Share: Recipient <u>13.12</u> % Federal <u>86.88</u> %.)</b>	\$835,117
<b>12. Total Approved Assistance Amount</b>	\$725,511
<b>13. Program Income</b>	\$0
<b>14. Total EPA Amount Awarded This Action</b>	\$725,511
<b>15. Total EPA Amount Awarded To Date</b>	\$725,511

## **Administrative Conditions**

### **1. General Administrative Terms and Conditions**

The recipient agrees to comply with the current EPA general terms and conditions available at:

[https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-March 26, 2016-or-later](https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-March-26,2016-or-later). These terms and conditions are in addition to the assurances and certifications made as a part of the award and the terms, conditions or restrictions cited throughout the award.

The EPA repository for the general terms and conditions by year can be found at <http://www.epa.gov/grants/grant-terms-and-conditions>.

### **2. UTILIZATION OF SMALL, MINORITY AND WOMEN'S BUSINESS ENTERPRISES**

#### **GENERAL COMPLIANCE, 40 CFR, Part 33**

The recipient agrees to comply with the requirements of EPA's Disadvantaged Business Enterprise (DBE) Program for procurement activities under assistance agreements, contained in 40 CFR, Part 33.

#### **MBE/WBE REPORTING, 40 CFR, Part 33, Subpart E**

MBE/WBE reporting is required in annual reports. Reporting is required for assistance agreements where there are funds budgeted for procuring construction, equipment, services and supplies, including funds budgeted for direct procurement by the recipient or procurement under subawards or loans in the "Other" category that exceed the threshold amount of \$150,000, including amendments and/or modifications.

Based on EPA's review of the planned budget, this award meets the conditions above and is subject to the Disadvantaged Business Enterprise (DBE) Program reporting requirements. However, if recipient believes this award does not meet these conditions, it must provide [insert Regional or Headquarters point of contact] with a justification and budget detail within 21 days of the award date clearly demonstrating that, based on the planned budget, this award is not subject to the DBE reporting requirements.

The recipient agrees to complete and submit a "MBE/WBE Utilization Under Federal Grants, Cooperative Agreements and Interagency Agreements" report (EPA Form 5700-52A) on an annual basis. All procurement actions are reportable, not just that portion which exceeds \$150,000.

When completing the annual report, recipients are instructed to check the box titled "annual" in section 1B of the form. For the final report, recipients are instructed to check the box indicated for the "last report" of the project in section 1B of the form. Annual reports are due by October 30<sup>th</sup> of each year. Final reports are due by October 30<sup>th</sup> or 90 days after the end of the project period, whichever comes first.

The reporting requirement is based on total procurements. Recipients with expended and/or budgeted funds for procurement are required to report annually whether the planned procurements take place during the reporting period or not. If no budgeted procurements take place during the reporting period, the recipient should check the box in section 5B when completing the form.

***MBE/WBE reports should be sent to:***

***United States Environmental Protection Agency,  
5 Post Office Square, Suite 100  
Boston, MA. 02109-3912  
Attn: Larry Wells, DBE Coordinator, Region 1***

If you have additional questions, Mr. Wells can be reach at (617) 918-1836, or e-mail: [Wells.Larry@epa.gov](mailto:Wells.Larry@epa.gov)

The current EPA Form 5700-52A can be found at the EPA Office of Small Business Program's Home Page at [http://www.epa.gov/osbp/dbe\\_reporting.htm](http://www.epa.gov/osbp/dbe_reporting.htm)

This provision represents an approved deviation from the MBE/WBE reporting requirements as described in 40 CFR, Part 33, Section 33.502; however, the other requirements outlined in 40 CFR Part 33 remain in effect, including the Good Faith Effort requirements as described in 40 CFR Part 33 Subpart C, and Fair Share Objectives negotiation as described in 40 CFR Part 33 Subpart D and explained below.

#### **FAIR SHARE OBJECTIVES, 40 CFR, Part 33, Subpart D**

A recipient must negotiate with the appropriate EPA award official, or his/her designee, fair share objectives for MBE and WBE participation in procurement under the financial assistance agreements.

In accordance with 40 CFR, Section 33.411 some recipients may be exempt from the fair share objectives requirements described in 40 CFR, Part 33, Subpart D. Recipients should work with their DBE coordinator, if they think their organization may qualify for an exemption.

#### **Current Fair Share Objective/Goal**

The dollar amount of this assistance agreement or the total dollar amount of all of the recipient's financial assistance agreements in the current federal fiscal year from EPA is \$250,000, or more. The **Massachusetts Department of Environmental Protection** has negotiated the following, applicable MBE/WBE fair share objectives/goals with EPA as follows:

**MBE: CONSTRUCTION; SUPPLIES; SERVICES and EQUIPMENT : Blended 3.4%**  
**WBE: CONSTRUCTION; SUPPLIES; SERVICES and EQUIPMENT : Blended 3.8%**

#### **Negotiating Fair Share Objectives/Goals**

In accordance with 40 CFR, Part 33, Subpart D, established goals/objectives remain in effect for three fiscal years unless there are significant changes to the data supporting the fair share objectives. The recipient is required to follow requirements as outlined in 40 CFR Part 33, Subpart D when renegotiating the fair share objectives/goals.

#### **SIX GOOD FAITH EFFORTS, 40 CFR, Part 33, Subpart C**

Pursuant to 40 CFR, Section 33.301, the recipient agrees to make the following good faith efforts whenever procuring construction, equipment, services and supplies under an EPA financial assistance agreement, and to require that sub-recipients, loan recipients, and prime contractors also comply. Records documenting compliance with the six good faith efforts shall be retained:

- (a) Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
- (b) Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- (c) Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
- (d) Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
- (e) Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
- (f) If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

#### **CONTRACT ADMINISTRATION PROVISIONS, 40 CFR, Section 33.302**

The recipient agrees to comply with the contract administration provisions of 40 CFR, Section 33.302.

#### **BIDDERS LIST, 40 CFR, Section 33.501(b) and (c)**

Recipients of a Continuing Environmental Program Grant or other annual reporting grant, agree to create and maintain a bidders list. Recipients of an EPA financial assistance agreement to capitalize a revolving loan fund also agree to require entities

receiving identified loans to create and maintain a bidders list if the recipient of the loan is subject to, or chooses to follow, competitive bidding requirements. Please see 40 CFR, Section 33.501 (b) and (c) for specific requirements and exemptions.

### **3. Annual Federal Financial Report (SF-425)**

Pursuant to 40 CFR 31.41(b) and 31.50(b), EPA recipients shall submit an annual Federal Financial Report (SF-425) to EPA no later than 90 calendar days following the end of the reporting quarter

At the end of the project, the recipient must submit a final Federal Financial Report to EPA no later than 90 calendar days after the end of the project period. The form is available on the internet at <http://www.epa.gov/ocfo/finservices/forms.htm> . All FFRs must be submitted to the Las Vegas Finance Center: US EPA, LVFC, PO Box 98515, Las Vegas, NV 89193, by Fax to: 702-798-2423 or E-mail: [LVFC-grants@epa.gov](mailto:LVFC-grants@epa.gov) .

The LVFC will make adjustments, as necessary, to obligated funds after reviewing and accepting a final Federal Financial Report. Recipients will be notified and instructed by EPA if they must complete any additional forms for the closeout of the assistance agreement.

### **4. PREAWARD COSTS**

This award includes the approval of preaward costs which were incurred up to 90 days prior to the award date.

## **Programmatic Conditions**

2016/2017 Southeast New England Program Grant Program: Programmatic Terms & Conditions

### **Substantial Involvement Terms and Conditions (Required)**

1. **Monitoring Progress** – The EPA Project Officer will maintain substantial involvement in the conduct of this project, including collaborative efforts with the recipient's Project Manager in: (1) planning and monitoring project activities; and (2) evaluation and review of progress throughout the phases of the project. The recipient agrees to submit semi-annual (e.g. every six (6) months) performance reports to their assigned EPA Project Officer.

2. **Review and Comment** - The EPA Project Officer will have the opportunity to review and comment on tasks/deliverables and reports prepared under the cooperative agreement. However, the recipient will make the final decision on the content of these products. In addition, the EPA Project Officer may review any proposed procurements in accordance with the applicable regulations at 2 CFR Parts 200 and 1500.

3. **Key Personnel** - As provided in 2 CFR § 200.308, if there is a change in key personnel specified in the application or award document, or the recipient's project director is absent for more than three months or reduces time devoted to the project by 25 percent or more, the recipient must request prior written approval for those changes.

### **SNEP Grants Training (Required)**

SNEP Grant recipients will be required to attend a webinar training session hosted by EPA New England

within three months of the public announcement of these grants. At least one representative from the recipient organization must participate.

**Reporting Terms and Conditions: Semi-annual Performance Reports (Required)**

The recipient agrees to submit semi-annual (e.g. every six (6) months) performance reports to their assigned EPA Project Officer within thirty (30) days after each reporting period. The first reporting period is six months after the date of the award. Recipients are encouraged to use the SNEP Progress Report Template provided by the EPA Project Officer.

*Performance Reports*

These reports should cover all activities identified in the work plan. In addition, performance reports submitted under this agreement should include brief information on each of the following areas (in accordance with 2 CFR § 200.328, as applicable):

- 1) A comparison of actual accomplishments with the anticipated outputs/outcomes specified in the work plan for the performance period;
- 2) If applicable, problems encountered during the performance period which may interfere with meeting program/project objectives and reasons for any slippage.
- 3) Proposed remedies if problem(s) exist (s).
- 4) Objectives that were approved in the workplan and will not be carried out, including supporting documentation as to why it will not be completed)
- 5) Additional pertinent information if applicable, including analysis and information regarding cost overruns, high unit costs, or unanticipated economics

2016/2017 Southeast New England Program Grant Program: Programmatic Terms & Conditions

**Reporting Requirements**

The recipient must report on its subaward monitoring activities under 2 CFR 200.331(d). Examples of items that must be reported if the pass-through entity has the information available are:

1. Summaries of results of reviews of financial and programmatic reports.
2. Summaries of findings from site visits and/or desk reviews to ensure effective subrecipient performance.
3. Environmental results the subrecipient achieved.
4. Summaries of audit findings and related pass-through entity management decisions.
5. Actions the pass-through entity has taken to correct deficiencies such as those specified at 2 CFR 200.331(e), 2 CFR 200.207 and the 2 CFR Part 200.338 Remedies for Noncompliance.

**Sharing of Data and Results (Required)**

Those applicants who collect data as part of their project, especially those who are required to develop a Quality Assurance Project Plan (QAPP), will be required to make data and results publicly available and readily transferable. Additionally, all applicants will be required to attend an in person workshop hosted by EPA Region 1 with other applicants to share results and lessons learned. This workshop will take place at the end of year 2.

**Involvement in Southeast New England Program**

All grantees will be expected to attend SNEP meetings at the subcommittee level. Subcommittee representation (i.e. Policy, Monitoring or Ecosystem subcommittees) will be up to the applicant and should be reflective of their project tasks. All grantees are required to attend the annual SNEP networking forum, the first of which will take place in the Fall of 2016.

**Final Reports (Required)**

In accordance with EPA regulations (2 CFR § 200.328), the recipient agrees to submit a final report to the EPA Project Officer within ninety (90) days after the expiration or termination of the approved project period. Information included in the final report shall include project highlights and results for use in public communication materials and **performance reports** information.



### *Project Highlights and Results*

The final report should include a brief abstract describing the project, its results, and its measurable impacts over the project period, including development of tools and resources, data collected and how to access it, and any communication materials developed for the project.

### *Performance Reports*

The final report should document project activities **over the entire project period** and should include information summarized from semi-annual reports.

### **Minimum Matching Share Requirement (Required)**

The recipient must provide a minimum cost-share/match of 10% of the total project cost to satisfy the recipient required match under this program. The cost-sharing or matching regulations are available at 2 CFR §§ 200.29 and 200.306. EPA's financial obligations are limited to the federal amount as shown on Line 12 in its EPA approved budget on page 3 of the Award Agreement. 2016/2017 Southeast New England Program Grant Program: Programmatic Terms & Conditions

### **Voluntary Cost-Share or Overmatch (Include if the recipient included an overmatch (non-federal cost-share/match greater than the required minimum 10% cost-share/match).)**

This award and the resulting federal funding is based on estimated costs requested in the recipient's final application. Included in these costs is a voluntary cost-share contribution by the recipient, which exceeds the minimum required cost-share/ match of 10%. The recipient must provide this voluntary cost-share contribution during the performance of this award unless the EPA agrees otherwise by modifying this agreement. While actual total costs may differ from the estimates in the recipient's application, EPA's participation shall not exceed the total amount of federal funds awarded. The cost-sharing or matching regulations are available at 2 CFR §§ 200.29 and 200.306.

If the recipient fails to provide the voluntary cost-share contribution during the period of award performance, and does not provide a satisfactory explanation, the Agency may consider this factor in evaluating future proposals from the recipient. In addition, if the voluntary cost-share contribution does not materialize during the period of award performance then EPA may reconsider the legitimacy of the award; if EPA determines that the recipient knowingly or recklessly provided inaccurate information regarding the voluntary cost-share the recipient described in its final application EPA may take action as authorized by 2 CFR § 200.338 and/or 2 CFR Part 180 as applicable.

### **Procurement Terms and Conditions (Include if procurement actions are included in the application and budget.)**

The recipient agrees to conduct all procurement actions under this assistance agreement in accordance with the procurement standards set forth in 2 CFR §§ 200.317 through 200.326. EPA will not reimburse the Federal share of any procurement action found to be in noncompliance with the procurement standards.

### **Quality Assurance (Include if Quality Assurance is implicated by the scope of the project.)**

In accordance with 2 CFR § 1500.11, the recipient must develop and implement quality assurance and quality control procedures, specifications and documentation that are sufficient to produce data of adequate quality to meet project objectives. The Quality Assurance Project Plan (QAPP) is the document that provides comprehensive details about the quality assurance/quality control requirements and technical activities that must be implemented to ensure that project objectives are met. The QAPP should be prepared in accordance with EPA QA/R-5: EPA Requirements for Quality Assurance Project Plans. The QAPP must be submitted to the EPA Project Officer at least 60 days prior to the initiation of data collection or data compilation. Prior to direct measurements or data generation, environmental modeling, compilation of data from literature or electronic media, and data supporting the design, construction, and operation of environmental technology, the QAPP must be completed and approved by the EPA Project Officer. When the recipient is delegating the responsibility for an environmental data

collection or data compilation activity to another organization, the EPA Regional Quality Assurance Manager may allow the recipient to review and approve that organization's QAPP."

The recipient must ensure all water quality data generated in accordance with an EPA approved Quality Assurance Project Plan, either directly or by subaward, is transmitted into the Agency's Storage and Retrieval (STORET) Data Warehouse annually or by project completion using either WQX or WQXweb. Water quality data that are appropriate for STORET include physical, chemical, and biological sample results for water, sediment and fish tissue. The data include toxicity data, microbiological data, and the metrics and indices generated from biological and habitat data. The Water Quality Exchange (WQX) is the water data schema associated with the EPA, State and Tribal Exchange Network. Using the WQX schema partners map their database structure to the WQX/STORET structure. WQXweb is a web-based 2016/2017 Southeast New England Program Grant Program: Programmatic Terms & Conditions tool to convert data into the STORET format for smaller data generators that are not direct partners on the Exchange Network. More information about WQX, WQXweb, and the STORET Warehouse, including tutorials, can be found at <http://www.epa.gov/storet/wqx/>

**Geospatial Data Standard (*Include if geospatial data creation is included in the application and budget.*)**

All geospatial data created must be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. Information on these standards may be found at [www.fgdc.gov](http://www.fgdc.gov).